

directed by John Weiley, and every note of its score came from a man I'd never heard of before: Nigel Westlake.

SOLARMAX is a 40-minute film about the sun's effects on our culture over the last several thousand years. It's got state-of-the-art CGI work, never-before-seen images shot in space, and a sweep that includes ancient Ireland, the Vikings, Copernicus, Galileo, and other notable thinkers. It's also got a huge format, which makes every moment both literally and figuratively oversized.

Best of all, it has its incredible, exuberant score. It's symphonic, primitive, at times heart stopping. Nigel Westlake attended the Conservatorium of Music High School in Sydney, Australia, but left early to pursue a career as a clarinetist. He started composing and formed a band, so his

work could be performed. His big break came from Weiley, who needed someone to score his Imax film ANTARCTICA.

What's your working relationship like?

Westlake: It's never been easy. John invests a lot more trust in me these days, but he's still very hands-on when discussing the direction of the compositional process. He speaks in metaphors, abstractions, riddles, and emotions... And he delights in pushing the barriers. He has an insatiable thirst for knowledge and exploration, and working beside him one becomes consumed by the thrill of discovery and the relentless quest for truth. He loves to re-invent the wheel at every opportunity, and the more original and dangerous the music becomes, the more excited he gets. Working with John is often an enormous challenge,

but at the end of the day it is an immensely rewarding experience.

Weiley: I always liked the idea of involving the composer from the beginning of the process, and I have talked to Nigel in general terms about each film before shooting. This was typically a year or more before he got to see anything. I will at that stage sometimes talk about the broad musical approach - instruments and so on.

Westlake: Like any good director, he can also be infuriating! Several times now we have spent literally weeks working on a particularly difficult cue, and even after recording the piece, he will decide that it is wrong, and we must start again, completely from scratch. (Of course he's always right - damn it!)

Weiley: I depend on music throughout the shooting and editing to give coherence and pacing and eventually structure to the work. I often time shots or camera movements by singing themes or phrases that seem appropriate. During editing this dependence is even more explicit: [My editor] and I will try various pieces of music first, and when we find something that seems right, cut the sequence to that piece of music. We never inflict the guide music on Nigel, and he goes out of his way to avoid hearing it.

Nigel, do you lean toward IMAX projects because of personal connections to the filmmakers - or does IMAX simply give you a much larger canvas to work in?

Westlake: There seems to be a general trend in IMAX films to abuse the power of the format. Very few directors are capable of showing restraint. John is one of the few directors who actually understands its power. He also understands the fact that a compelling piece of work must have contrast and subtleties in order to engage the audience, in order to have them emerge from the experience with a sense of wonder and fulfillment instead of feeling shell-shocked. Musically, it requires ideas that are simple and economical. It's important that the score is not overly burdened with busy, detailed orchestration. It must be clearly understood on first listening because most people will only ever see it once. I think of it in terms of working with broad brush strokes as opposed to detailed line drawing.

Because you and John work so closely together, did you compose themes for the film ahead of time - or did you wait until there was a final cut?

Westlake: John spoke to me about SOLARMAX well before he was into pre-production. Right through the shoot he was throwing me snippets of information and got me thinking about the score. There was never a storyboard or synopsis, and I knew the form of the film wouldn't start to gel until all the rushes had been viewed and they were well into the editing, so I didn't start writing until I got the final cut.

Nigel's music for **SOLARMAX**, aside from its beauty on many levels, seems more like a narrative-film score than it does a documentary-film score. John, was this part of your direction? Or is that simply just how it turned out?

Weiley: I do not cut my films to fit any preconceived narration or structure.. We cut to make "emotional sense." Phrases for a narration go through my head all the time - even when I am shooting - but I never allow the words to determine the structure. I regard the narration as lyrics. The images, sound effects, and music are the "music" to which I have to write. I never write the narration until everything else is finished. This turns the writing into a real brain buster, and I don't recommend the technique to anyone who values sanity or sleep, but it is the way I have to do it.

For me music is the transcendent art, and composing music the most sublime of human activities: It really is stealing from the angels. I often say, only half jokingly, that I only shoot the pictures so that people will have something to look at while they listen to Nigel's music. I like making IMAX movies because they are a kind of throwback to "silent" movies: For technical reasons, it's practically impossible to shoot sync sound, so we don't have to shoot what Hitchcock called (and despised) "people chattering." Silent movies have to be constructed like music. Themes have to be introduced, developed, and resolved, rhythms established, and so on.

I think the distinctive thing about the **SOLARMAX** score is the scope of it. It nimbly moves easily from intimate little motifs to grand moments that seem as big as the universe.

Westlake: The film covers mankind's relationship with the sun from a religious and scientific perspective, from the dawn of time to the present day and beyond. It's an ambitious amount of subject matter to cover in 40 minutes, and of course the music's role was to support these concepts and provide an underlying continuity.

John, do you and Nigel spot the film together? Do you come to him with musical ideas, or do you let him run wild and surprise you?

Weiley: We do spot the film together, but I try very hard to avoid being too explicit - I want the music to be an original voice - so I drop hints, talk in generalities and "poetic hyperbole." We do not in fact spend a lot of time on spotting: This bit is quite quick. Nigel is, in one sense, a superb instrument: If I am clear about what I am trying to do and I get the words right at this stage, then music that is astonishingly appropriate but at the same time original comes back right away. His facility for being able to turn a director's waffle about what the music must do into original, effective music is almost uncanny.

The really sublime moments come for me when Nigel picks up on a theme that I have buried quite deeply in the images and been unable to articulate, but have hoped against hope would somehow find its way through into the consciousness of the audience. If I had to nominate a single reason for continuing to work with Nigel, that capacity for getting beneath the surface would be it.

That said, Nigel, you tried to evoke deep, cultural feelings for certain sections of the film. "First Light," for example, is filled with Irish sounds. But more than that, the idea of wind instruments symbolizes the movement of the sunlight through the perfect alignment of Newgrange, just as breath moves through the flute.

Westlake: The breath analogy is a nice one and something that hadn't even occurred to me. Although this cue is probably the simplest musically in the whole film, I threw out quite a lot of material in my search for the right sound. John suggested we try

to recreate the music of the era in which this ancient temple was built (3000 BC). Of course, one can only speculate about such matters, but it would be fair to assume that a simple flute made of bone may have been played by the people of this time. I adapted an ancient Irish lament and then recorded it on a modern recreation of a bone flute, getting the player to improvise freely with the phrases. I chose my favorite takes for each phrase out of the numerous improvisations.

"Inti Huatana" starts with Andean panpipes, then builds on that with strings, percussion, brass, and choir, then segues into a gentle, thematic section that sounds like narrative film music. The overall effect is that you're not scoring a documentary, but truly a narrative film, with a definite story and characters.

Westlake: That's an interesting observation because in much the same way as a narrative film, the **SOLARMAX** score actually employs the use of leitmotif fairly extensively. Each element of the film has its own voice, musically speaking. The sun's theme is the recurring vocal piece "O Sol." Primitive religious concepts are underscored with a massive percussion ensemble. The images of contemporary astronomy and space research are supported by a kind of recurring "hymn to science," and the story of Galileo is dealt with in a classical style, perhaps somewhat reminiscent of music of that era.

"Aurora" is the centerpiece of the score. It's playful and grand and shot through with a dance-like motif, like fabric moving in a great wind. This evokes the aurora borealis, and near the end of the cue, with Middle Eastern colors, it's almost as if you're likening the borealis to the movements of a dress worn by a woman dancing.

Westlake: Due to the intense nature of the subject matter, we always ran the risk of ending up with an overly serious film, so we were always seeking opportunities to lighten things up a bit. Scoring

the aurora as a whimsical ballet (a kind of waltz in 6/4) created a

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welcome contrast to some of the more somber material in the score. The music is very mercurial and busy, lots of sweeping scales and ethereal textures. I proposed the Middle Eastern "feel" (with darabuka and finger cymbals) as a joke - a sort of "dance of the seven veils" - but John loved the idea, so it stuck.

The last cue on the CD, "Missa Solis," seems to be a review of what's come before: the Andean panpipes and tribal percussion from "Inti Huatana." then the choir in a grand crescendo, then a dramatic section that's filled with powerful cinematic moments. It moves from the big sounds immediately to smaller ones, with a real sense of wonder and appreciation that everything is in its proper place. And you end with a single string against deep horns, a decidedly classical feeling. Westlake: The film ends with a sequence of shots more or less recapping all the elements dealt with in the film, and finally one of the prize moments spectacular footage of the sun's surface taken from the S.O.H.O. telescope - a million and a half miles away from earth. "We are tracking the face of God" was John's response to my question, "What sort of music would you like here?" It's a very typical answer and gives you some idea of the way he works. "Missa Solis" is a major musical moment in the film, and all the musical elements are drawn

together in a massive explosion of sound that peaks as the audience travels through the heart of the Sun - to emerge into the star field on the other side of the solar system. It's a brave piece of filmmaking, and it took quite a while for the sequence to gel.

John, in the way that Steven Spielberg and John Williams have forged a rare Hollywood partnership, do you see Nigel as your own personal composer? Can you see yourself working with another composer at this point?

Weiley: I greatly enjoy the work of other composers, but I could not do a movie with them. It's a kind of delightful frustration, like watching pretty girls when you are happily married - and, as with a happy marriage, the collaboration just gets deeper and richer and more rewarding.

Nigel, John wrote me that working with you "is for me the most exciting part of the whole process." What's the most exciting part of the process for you? Westlake: Apart from seeing the film for the first time in a proper IMAX theatre, the orchestral sessions were the highlight for me. I like to conduct my film recording sessions whenever possible. It can be a fairly terrifying experience initially, and although I'm no great conductor, I know what I want. For me, the conductor / performer

relationship works best when there is a mutual respect between the two. As a conductor, I believe I am creating the music in partnership with the performers, and their interpretation is a crucial part of the final work.

And John, can you elaborate for me what you meant when you wrote that?

Weiley: One of the most personally satisfying aspects of working with Nigel has been the opportunity to be around while he matures musically. He has always had enormous talent - his ability to invent one beautiful and original theme after another has always been awesome - but with each work it is obvious that he gets stronger, more sure-footed, more mature as a composer.

No one has ever accused me of being a very modest person, and I think I have made some good films. But if anyone is looking for my name three hundred years from now, my best chance is that they will find it in a footnote as someone who commissioned several of the early works of Nigel Westlake. That'll do me fine.

The SOLARMAX score is available on CD at select IMAX theaters, from the Museum of Science and Industry in Chicago, Illinois, USA (website: www.msichicago.org) or from Rimshot Music Australia (website: www.rimshot.com.au).